

Job Description

Missouri State Highway Patrol

Class Title: Criminalist III - DNA (Convicted Offenders)

Title Code: V00515

Effective Date: 04/24/96

Date Reviewed:

Date Revised: 10/24/05

Immediate Supervisor: Criminalist Supervisor

Position Supervised: None

FLSA Classification: Non-exempt

Working Hours: An employee in this position works an eight-hour shift as directed by the division director; however, working hours are subject to change at the discretion of the commanding authority.

POSITION SUMMARY

This is a very responsible professional and technical position. Work includes performing complex and technical work in the collection and scientific analysis of biological samples for DNA profiling of convicted offenders and sexually violent predators under Missouri statutes using current DNA techniques. The employee also serves as a lead worker by training other criminalists and laboratory technicians. Work includes preparing reports, developing procedures for the laboratory, testifying in court, providing interviews and instructing others about DNA profiling. Work is performed with considerable independence within the framework of established policies and procedures.

DESCRIPTION OF DUTIES PERFORMED

(Any one position may not include all of the duties listed nor do the listed examples include all tasks, which may be found in positions of this class.)

Informs and advises supervisor of unit's operations; may assume supervisor's responsibilities when supervisor is absent.

Regularly performs DNA analysis on biological samples from convicted offenders and sexually violent predators using FTA Purification; PCR - STR analysis, capillary electrophoresis; interprets results with GeneMapper ID and enters DNA profiles into the Combined DNA Index System; assists with training unit's new employees to analyze DNA samples; assists with monitoring the offender databases for accuracy and completeness; performs profile searches; trains unit's new employees to properly analyze DNA samples.

Collects and/or receives biological samples from convicted offenders and sexually violent predators; enters information into a database; prepares samples for DNA analysis; assists with monitoring the collection and receipt of DNA samples; assists with the collection and dissemination of statistics.

Properly operates sensitive and complex scientific instrumentation and equipment; performs maintenance, troubleshooting and repair of instruments and equipment; advises supervisor and arranges for repair, if needed; assists with billing for parts and repair; signs for receipt of equipment and repair; performs and monitors proper quality control checks for repaired and new equipment; performs research, development and application of methods and/or techniques to upgrade unit's capability; performs validation studies.

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Regularly works with chemical and biological hazards; monitors that personnel are using proper safety precautions; advises and suggests any necessary changes or hazards.

Performs work in accordance with all applicable quality assurance standards; assists with monitoring the unit's adherence to quality assurance standards.

Responds to requests from other agencies and laboratories regarding DNA Profiling; assists with maintaining documentation and monitoring appropriate release of information.

Successfully completes competencies on new DNA technology; assists with the monitoring of employees DNA competency and proficiency tests.

Successfully completes two DNA proficiencies each year.

Trains law enforcement and corrections employees on the proper methods of collection, preserving and documenting the collection of DNA samples; assists with developing training programs; assists with the monitoring of the training.

Develops and provides technical and scientific presentations to law enforcement and corrections personnel, attorneys and other scientists; assists with the monitoring and critiquing of unit's employee's presentations.

Prepares and provides courtroom testimony; assists with monitoring and critiquing unit's employee's testimony; assists with providing training to employees for giving testimony.

Advises of units ordering needs; places orders; assists with maintaining unit's budget.

Knowledge of standard operating procedures, training, quality control and safety manuals within discipline; makes change suggestions for manuals and forms; assists with writing and correcting procedures, manuals and forms; assists with evaluating procedures and manuals.

Operates standard office equipment, such as personal computer, telephones, fax machines and copiers; trains unit's employees on operation of office equipment; advises supervisor of repair needs of office equipment; assists with submitting repair requests for additional equipment.

Assists with compiling statistics; assists with drafting briefs for management; provides testimony to management, legislators and other government officials; interacts with media.

Assists with researching and drafting law proposals; assists with developing fiscal notes.

Assists with researching, writing applications and monitoring grants; assists with maintaining budget.

Takes on additional duties such as unit's quality assurance manager and safety manager.

Performs in and out of state, job related travel.

Performs other related duties as assigned.

REQUIRED KNOWLEDGE, SKILLS, AND ABILITIES

Thorough knowledge of the procedures and methods used in the collection and scientific analysis of biological samples for DNA profiling.

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Thorough knowledge of the compilation and preparation of evidence for presentation in court and the role of an expert witness in legal proceedings.

Thorough knowledge and practice of safety rules and procedures associated with laboratory equipment and chemicals.

Thorough knowledge of the conditions of the Missouri Statute regarding DNA profiling of convicted offenders.

Ability to read English effectively.

Ability to communicate in English clearly and concisely, both orally and in writing.

Ability to serve as a lead worker by providing training criminalists and laboratory technicians regarding DNA collection and analysis.

Ability to work with potentially hazardous materials as detailed in the description of duties.

Ability to generate and receive requests for information from a variety of individuals regarding DNA analysis.

Ability to perform work in accordance with prescribed procedures, make accurate observations of test results, and prepare accurate records and reports.

Ability to gather, assemble, correlate, and analyze facts to be incorporated into a report of laboratory work and tests.

Ability to maintain composure while under cross-examination in regard to personal and scientific qualifications and defend laboratory findings in court.

Ability to work with restricted, highly sensitive information in a confidential and professional manner.

Ability to compile and prepare information for presentation (e.g., mock trials held in the laboratory and actual court appearances).

Ability to recognize and identify minute details.

Ability to establish and maintain effective working relations with others.

Ability to properly use laboratory equipment, photography equipment, standard office equipment, and chemicals.

Ability to prepare reagents and standards as prescribed in the appropriate procedure and quality manuals.

Ability to perform job-related travel (e.g., appearing in court and attending training meetings, seminars, etc.).

Ability to distinguish colors necessary to perform laboratory tests.

Ability to stand for extended periods and lift moderate loads (30 pounds).

Ability to participate in and successfully pass practical and/or written competency test(s) prior to assuming DNA profiling duties.

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Ability to educate individuals regarding forensic science.

Ability to develop and validate methods and/or techniques to upgrade laboratory capabilities.

Ability to review and revise manuals.

Ability to interact with the media.

Ability to work with material that may be of a sexual nature relating to criminal activity (e.g., written material, photographs, and/or verbal language, etc.).

Ability to work hours as assigned.

Ability to safely operate a motor vehicle.

MINIMUM EXPERIENCE, EDUCATION, AND TRAINING REQUIRED

(The following represents the minimum qualifications used to accept applicants, provided that equivalent substitution will be permitted in case of deficiencies in either experience or education.)

Possess a baccalaureate degree in one of the natural sciences or a closely related field; coursework must include 20 semester hours in biology to include college coursework covering the subject areas of genetics, biochemistry, molecular biology (molecular genetics, recombinant DNA technology). Course work and/or training in statistics and population genetics as it applies to forensic DNA is recommended. These courses must comply with the FBI's Quality Assurance Standards for Convicted Offender DNA Databasing Laboratories and ASCLD/LAB's accreditation criteria. A minimum acceptable grade of C or equivalent in these core biology courses and the core baccalaureate major courses is required. Core courses with grades less than a C must be resolved by retaking the course and achieving a grade of at least a C. Prior job experience will not replace these minimum academic requirements.

Possess at least two years of experience as a Criminalist II - DNA Profiling or comparable experience.

NECESSARY SPECIAL REQUIREMENTS

Must be a resident of Missouri at the time of appointment.

Must possess a valid Missouri drivers' license at the time of appointment.

Must be able to pass a polygraph examination after conditional offer of employment.

Must provide a DNA sample to be used only for forensic identification as required at the time of appointment.

